

§ 98.33-5

Commandant. Requests for such authorization must be submitted as prescribed in §153.900(d)(1) of this chapter.

[CGD 84-043, 55 FR 37412, Sept. 11, 1990, as amended by CGD 97-057, 62 FR 51046, Sept. 30, 1997]

§98.33-5 Portable tanks authorized.

The cargoes authorized under §98.33-3 may be transferred to and from portable tanks to which this subpart applies if the portable tanks have:

- (a) A minimum design pressure of 9 psig.
- (b) Pressure-relief devices that may be frangible pressure-relief devices (rupture disks), and that do not open at less than 3 psig.

[CGD 84-043, 55 FR 37412, Sept. 11, 1990; 55 FR 47477, Nov. 14, 1990]

§98.33-7 Pipe and hose connections.

If a portable tank authorized under §98.33-5 of this part has a pipe or hose connection in its bottom, the connection must have a manually operated valve and a bolted flange, threaded cap, or similar device, to protect against leakage of the tank's contents.

§98.33-9 Stowage.

Each portable tank authorized under §98.33-5 of this part must be secured to the vessel by devices of sufficient strength and number to prevent the tank from moving in any direction during transport.

§98.33-11 Smoking.

No person may smoke when—

- (a) Within 50 feet of a portable tank containing a combustible liquid; and
- (b) On the deck where the tank is stowed.

§98.33-13 Cargo-handling systems.

A cargo authorized under §98.33-3 of this part may not be transferred to or from a portable tank authorized under §98.33-5 of this part unless the cargo-handling system meets the requirements of subpart F of part 64 of this chapter.

§98.33-15 Transfers.

A cargo authorized under §98.33-3 of this part may not be transferred to or from a portable tank authorized under

46 CFR Ch. I (10-1-97 Edition)

§98.33-5 of this part unless the following requirements are met:

- (a) *Cargo pumps* comply with §98.30-11 of this part;
- (b) *Ground connection* complies with §98.30-13 of this part;
- (c) *Leakage containment* complies with §98.30-15 of this part;
- (d) *Qualification of person in charge* complies with §98.30-17 of this part;
- (e) *Supervision of person in charge* complies with §98.30-19 of this part;
- (f) *Transfers, general*, comply with §98.30-23 of this part;
- (g) *Connections* comply with §98.30-27 of this part;
- (h) Pumping of incompatible products complies with §98.30-29 of this part;
- (i) Conditions for pumping comply with §98.30-31 of this part; and
- (j) *Carriage of NLSs* complies with §98.30-14 of this part.

[CGD 84-043, 55 FR 37412, Sept. 11, 1990; 55 FR 47477, Nov. 14, 1990]

PART 105—COMMERCIAL FISHING VESSELS DISPENSING PETROLEUM PRODUCTS

Subpart 105.01—Administration

Sec.

105.01-1 Purpose.

105.01-5 Intent of Pub. L. 90-397 (approved July 11, 1968, 82 Stat. 341) and Pub. L. 93-430 (approved October 1, 1974, 88 Stat. 1180).

105.01-10 Effective date of regulations.

Subpart 105.05—Application

105.05-1 Commercial fishing vessels dispensing petroleum products.

105.05-2 Prohibitions regarding petroleum products.

105.05-3 New vessels and existing vessels for the purpose of application of regulations in this part.

105.05-5 Types of vessels.

105.05-10 Intent of regulations.

Subpart 105.10—Definition of Terms Used in This Part

105.10-1 General.

105.10-5 Approved.

105.10-10 Combustible liquid.

105.10-15 Flammable liquid.

105.10-20 Pressure vacuum relief valve.

105.10-25 Commercial fishing vessel.

Coast Guard, DOT

§ 105.01-5

Subpart 105.15—Inspection Required

- 105.15-1 General.
- 105.15-5 Authority of marine inspectors.
- 105.15-10 Application for inspection.
- 105.15-15 Letter of compliance.
- 105.15-20 Exhibition of letter of compliance.

Subpart 105.20—Specific Requirements—Cargo Tanks

- 105.20-1 Plans and/or sketches.
- 105.20-3 Cargo tanks.
- 105.20-5 Piping systems.
- 105.20-10 Pumps.
- 105.20-15 Grounding.

Subpart 105.25—Additional Requirements—When Cargo Tanks Are Installed Below Decks

- 105.25-1 General requirements.
- 105.25-5 Compartments or areas containing cargo tanks or pumping systems.
- 105.25-7 Ventilation systems for cargo tank or pumping system compartment.
- 105.25-10 Cargo pumping installation.
- 105.25-15 Spacings around tanks.
- 105.25-20 Shutoff valves required.

Subpart 105.30—Electrical Requirements

- 105.30-1 Electrical fittings and fixtures.
- 105.30-5 Grounding of electrical equipment.

Subpart 105.35—Fire Extinguishing Equipment

- 105.35-1 General.
- 105.35-5 Fire pumps.
- 105.35-10 Fire main system.
- 105.35-15 Fire hose.

Subpart 105.45—Special Operating Requirements

- 105.45-1 Loading or dispensing petroleum products.
- 105.45-5 Galley fires.
- 105.45-10 Smoking.
- 105.45-15 Warning signals and signs.
- 105.45-20 Warning sign at gangway.

Subpart 105.90—Existing Commercial Fishing Vessels Dispensing Petroleum Products

- 105.90-1 Existing commercial fishing vessels dispensing petroleum products.

AUTHORITY: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 3703, 4502; 49 U.S.C. App. 1804; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp., p. 793; 49 CFR 1.46.

SOURCE: CGFR 69-53, 34 FR 11265, July 4, 1969, unless otherwise noted.

Subpart 105.01—Administration

§ 105.01-1 Purpose.

The purpose of the regulations in this part is to provide adequate safety in the transporting and handling of inflammable or combustible cargo in bulk on board certain commercial fishing vessels and tenders.

[CGD 95-028, 62 FR 51208, Sept. 30, 1997]

EFFECTIVE DATE NOTE: By CGD 95-028, 62 FR 51208, Sept. 30, 1997, § 105.01-1 was revised, effective Oct. 30, 1997. For the convenience of the user, the superseded text is set forth as follows:

§ 105.01-1 Purpose.

The purpose of the regulations in this part is to provide adequate safety in the transporting and handling of inflammable or combustible cargo in bulk on board certain commercial fishing vessels and tenders, as authorized by 46 U.S.C. 391a (Tanker Act; R.S. 4417a), as amended by section 4 of Pub. L. 90-397 (approved July 11, 1968, 82 Stat. 341) and section 6(3) of Pub. L. 93-430 (approved October 1, 1974, 88 Stat. 1183). The regulations in this part set forth minimum requirements for two categories of commercial fishing vessels and tenders which have on board inflammable or combustible cargo in bulk.

[CGD 75-105, 41 FR 17910, Apr. 29, 1976]

§ 105.01-5 Intent of Pub. L. 90-397 (approved July 11, 1968, 82 Stat. 341) and Pub. L. 93-430 (approved October 1, 1974, 88 Stat. 1180).

(a) Pub. L. 90-397 allowed cannery tenders, fishing tenders, and fishing vessels of not more than 500 gross tons used in the salmon or crab fisheries of the States of Oregon, Washington, and Alaska when engaged exclusively in the fishing industry, to have on board inflammable or combustible cargo in bulk to the extent and upon conditions as might be required by regulations promulgated by the Secretary of the department in which the Coast Guard is operating.

(b) Pub. L. 93-430 allowed vessels of not more than 5000 gross tons used in the processing and assembling of fishery products in the fisheries of the States of Oregon, Washington, and Alaska to have on board inflammable or combustible cargo in bulk to the extent and upon conditions as might be required by regulations promulgated

by the Secretary of the department in which the Coast Guard is operating.

[CGD 75-105, 41 FR 17910, Apr. 29, 1976]

§ 105.01-10 Effective date of regulations.

(a) Amendments, revisions, or additions to the regulations in this part will become effective 90 days after the date of publication in the FEDERAL REGISTER, unless the Commandant directs otherwise.

(b) The regulations in this subchapter are not retroactive in effect unless specifically made so at the time the regulations are issued. Changes in specification requirements of articles of equipment or materials used in construction shall not apply to such items which have been passed as satisfactory until replacement shall become necessary, unless a specific finding is made that such equipment or material used is unsafe or hazardous and has to be removed from vessels.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 75-105, 41 FR 17910, Apr. 29, 1976]

Subpart 105.05—Application

§ 105.05-1 Commercial fishing vessels dispensing petroleum products.

(a) The provisions of this part, with the exception of Subpart 105.90, shall apply to all commercial fishing vessels of not more than 500 gross tons used in the salmon or crab fisheries of Oregon, Washington, and Alaska, the construction of which is contracted for on or after December 1, 1969, and all vessels of not more than 5000 gross tons used in the processing and assembling of fishery products in the fisheries of the States of Oregon, Washington, and Alaska, the construction of which is contracted for on or after May 31, 1976 which have or propose to have permanently or temporarily installed tanks or containers for dispensing petroleum products, Grades B and lower flammable or combustible liquids, in bulk in limited quantities.

(b) The provisions of Subpart 105.90 shall apply to all commercial fishing vessels of not more than 500 gross tons used in the salmon or crab fisheries of Oregon, Washington, and Alaska, the

construction of which was contracted for prior to December 1, 1969, and all vessels of not more than 5000 gross tons used in the processing and assembling of fishery products in the fisheries of the States of Oregon, Washington, and Alaska, the construction of which is contracted for prior to May 31, 1976 which have or propose to have permanently or temporarily installed tanks or containers for dispensing petroleum products, Grades B and lower flammable or combustible liquids, in bulk in limited quantities.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 75-105, 41 FR 17910, Apr. 29, 1976]

§ 105.05-2 Prohibitions regarding petroleum products.

(a) Commercial fishing vessels shall not transport Grade A flammable liquids in bulk. (See § 105.10-15(a) for definition of Grade A flammable liquid.)

(b) On commercial fishing vessels, temporarily installed dispensing tanks or containers shall not be installed or carried below deck or in closed compartments on or above the deck.

§ 105.05-3 New vessels and existing vessels for the purpose of application of regulations in this part.

(a) *New vessels.* In the application of the regulations in this part, the term "new vessels" means any commercial fishing vessel of not more than 500 gross tons used in the salmon or crab fisheries of Oregon, Washington, or Alaska, the construction of which is contracted for on or after December 1, 1969, and vessels of not more than 5000 gross tons used in the processing and assembling of fishery products in the fisheries of the States of Oregon, Washington, and Alaska, the construction of which is contracted for on or after May 31, 1976.

(b) *Existing vessels.* In the application of the regulations in this part, the term "existing vessels" means any commercial fishing vessel of not more than 500 gross tons used in the salmon or crab fisheries of Oregon, Washington, or Alaska, the construction of which is contracted for prior to December 1, 1969, and vessels of not more than 5000 gross tons used in the processing and assembling of fishery products in

Coast Guard, DOT

§ 105.10-15

the fisheries of the States of Oregon, Washington, and Alaska, the construction of which is contracted for prior to May 31, 1976.

[CGD 75-105, 41 FR 17910, Apr. 29, 1976]

§ 105.05-5 Types of vessels.

(a) The only types of commercial fishing vessels to which the provisions of this part apply are self-propelled manned vessels with one of the following:

(1) Permanently installed dispensing tanks or containers on open decks.

(2) Permanently installed dispensing tanks or containers located below deck or in closed compartments.

(3) Temporary dispensing tanks or containers installed on open decks.

[CGD 75-105, 41 FR 17910, Apr. 29, 1976]

§ 105.05-10 Intent of regulations.

(a) The intent of the regulations in this part is to prescribe special requirements for commercial fishing vessels which are otherwise exempt from requirements of vessel inspection, but by reason of occasionally engaging in the service of carrying on board and dispensing liquid inflammable and combustible cargo in bulk are subject to certain requirements of title 46 U.S.C. section 391a.

(b) The application of the regulations governing petroleum products in bulk is limited to that portion of the vessel involved in the storage, carriage, and handling of such products. This shall include, but shall not be limited to:

(1) Permanently or temporarily installed tanks or containers;

(2) Compartments, areas or places where such tanks or containers are placed;

(3) Fuel filling systems;

(4) Fuel venting systems;

(5) Fuel piping and pumping systems.

(c) The regulations in this part also state the manning, crew requirements, and officers for those vessels when required by other specific provisions of law.

(1) Vessels carrying flammable or combustible liquids in bulk are required by section 391a(6)(a) of title 46, U.S.C., to have aboard certificated tankermen.

(2) Vessels of 200 gross tons and upward and operating on the high seas are subject to the Officers' Competency Certificate Convention, 1936, and section 224a of title 46, U.S.C., regarding licensed masters, mates, chief engineers, and assistant engineers.

Subpart 105.10—Definition of Terms Used in This Part

§ 105.10-1 General.

(a) Certain terms used in the regulations in this part are defined in this subpart.

EFFECTIVE DATE NOTE: By CGD 95-028, 62 FR 51208, Sept. 30, 1997, § 105.10-1 was removed, effective Oct. 30, 1997.

§ 105.10-5 Approved.

(a) The term *approved* means approved by the Commandant, U.S. Coast Guard, unless otherwise stated.

§ 105.10-10 Combustible liquid.

(a) The term *combustible liquid* means any liquid having a flashpoint above 80° F. (as determined from an open cup tester, as used for test of burning oils). In the regulations of this part, combustible liquids are referred to by grades, as follows:

(1) *Grade D*. Any combustible liquid having a flashpoint below 150° F. and above 80° F.

(2) *Grade E*. Any combustible liquid having a flashpoint of 150° F. or above.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 73-96, 42 FR 49025, Sept. 26, 1977]

§ 105.10-15 Flammable liquid.

(a) The term *flammable liquid* means any liquid which gives off flammable vapors (as determined by flashpoint from an open cup tester, as used for test of burning oils) at or below a temperature of 80° F. Flammable liquids are referred to by grades as follows:

(1) *Grade A*. Any flammable liquid having a Reid¹ vapor pressure of 14 pounds or more.

¹American Society of Testing Materials Standard D-323 (most recent revision), Method of Test for Vapor Pressure of Petroleum Products (Reid Method).

(2) *Grade B.* Any flammable liquid having a Reid ¹ vapor pressure under 14 pounds and over 8½ pounds.

(3) *Grade C.* Any flammable liquid having a Reid ¹ vapor pressure of 8½ pounds or less and a flashpoint of 80° F. or below.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 73-96, 42 FR 49025, Sept. 26, 1977]

§ 105.10-20 Pressure vacuum relief valve.

(a) The term *pressure vacuum relief valve* means any device or assembly of a mechanical, liquid, weight, or other type used for the automatic regulation of pressure or vacuum in enclosed places.

§ 105.10-25 Commercial fishing vessel.

(a) The term *commercial fishing vessel* includes fishing vessels, cannery tenders, fishing tender vessels, and vessels processing or assembling fishery products.

[CGD 75-105, 41 FR 17910, Apr. 29, 1976]

Subpart 105.15—Inspection Required

§ 105.15-1 General.

(a) Before a commercial fishing vessel may be used to transport combustible or flammable liquids in bulk in limited quantities for the purpose of dispensing those liquids, the vessel shall be inspected by the Coast Guard to determine that the vessel is in substantial compliance with the requirements in this part.

(b) A vessel with permanently installed cargo tanks shall be inspected biennially, or more frequently if necessary, by the Coast Guard to determine that the vessel is maintained in substantial compliance with the requirements in this part.

(c) A vessel with temporarily installed cargo tanks or containers shall be inspected annually, or more frequently if necessary, by the Coast Guard.

(d) Vessels while laid up or dismantled or out of commission are exempt from any or all inspections required by law or regulations in this part.

§ 105.15-5 Authority of marine inspectors.

(a) Marine inspectors may at any time lawfully inspect any vessel subject to the requirements in this part.

§ 105.15-10 Application for inspection.

(a) Prior to the commencement of the construction of a new vessel, or a conversion of a vessel to a commercial fishing vessel, intended for transporting combustible or flammable liquids in bulk in limited quantities for the purpose of dispensing those liquids, the owners, master, or agent shall submit an application for inspection and a letter of compliance to an Officer in Charge, Marine Inspection, at any Marine Inspection Office, U.S. Coast Guard.

(b) Application for inspection and renewal of letter of compliance of a vessel shall be made in writing by the master, owner, or agent to an Officer in Charge, Marine Inspection, at any Marine Inspection Office, U.S. Coast Guard.

(c) The application for inspection and letter of compliance shall be on Form CG-3752 or in letter form and set forth the following information:

- (1) Vessel's name;
- (2) Nature of employment and route or areas in which to be operated;
- (3) Date and place where the vessel may be inspected;
- (4) Date and place where the vessel was last inspected (if inspected); and,
- (5) That application for inspection has not been made to any other Officer in Charge, Marine Inspection.

§ 105.15-15 Letter of compliance.

(a) When a vessel has been inspected and found to be in substantial compliance with the requirements of this part, a "letter of compliance" shall be issued to the vessel by the Officer in Charge, Marine Inspection.

(b) The letter of compliance shall permit the presence on board of liquid flammable or combustible cargoes in bulk, and describe the conditions governing the transportation and dispensing of such cargoes.

(c) The letter of compliance shall state the maximum amount of liquid flammable or combustible cargo in bulk to be carried on board.

(d) The letter of compliance shall be limited to a period of validity which shall not exceed 2 years. For cause, the letter of compliance may be suspended or revoked as authorized by law or regulations in this chapter.

§ 105.15-20 Exhibition of letter of compliance.

(a) On every vessel subject to this part, the original letter of compliance shall be framed under glass or other suitable transparent material and posted in a conspicuous place protected from the weather.

Subpart 105.20—Specific Requirements—Cargo Tanks

§ 105.20-1 Plans and/or sketches.

(a) The owners, master, or agent of a commercial fishing vessel shall submit with his application for the initial inspection a brief description and the plans and/or sketches of the cargo tanks and piping systems for filling and dispensing cargo; dimensions and identifications of material shall be included.

(b) If cargo tanks will be located in enclosed compartments or below decks, the plans and/or sketches shall also show the proposed ventilation system.

(c) Plans and/or sketches are not required if the cargo tanks and piping systems have previously been accepted by the Coast Guard.

§ 105.20-3 Cargo tanks.

(a) *Construction and Materials.* (1) The cargo tanks must be constructed of iron, steel, copper, nickel alloy, copper alloy; or aluminum. The tanks shall be designed to withstand the maximum head to which they may be subjected, except that in no case shall the thickness of the shell or head be less than that specified in this subparagraph. Tanks of over 150 gallons capacity shall have a minimum thickness as indicated in Table 105.20-3(a)(1):

TABLE 105.20-3(a)(1)

Material	A.S.T.M. specification (latest edition)	Thickness in inches and gage number ^{2,3}
Nickel copper	B127, hot rolled sheet or plate.	0.107 (USSG 12).

TABLE 105.20-3(a)(1)—Continued

Material	A.S.T.M. specification (latest edition)	Thickness in inches and gage number ^{2,3}
Copper nickel ¹	B122, Alloy No. 5.	0.128 (AWG 8).
Copper ¹	B152, Type ETP	0.182 (AWG 5).
Copper silicon ¹	B97, Alloys A, B, and C.	0.144 (AWG 7).
Steel or iron	0.179 (MSG 7).
Aluminum ⁴	B209, Alloy	⁵ 5086 0.250 (USSG 3).

¹Tanks fabricated with these materials shall not be utilized for the carriage of diesel oil.

²The gage numbers used in this table may be found in many standard engineering reference books. The letters "USSG" stand for "U.S. Standard Gage" which was established by the act of Mar. 3, 1892 (15 U.S.C. 206) for sheet and plate iron and steel. The letters "AWG" stand for "American Wire Gage" (or Brown and Sharpe Gage) for nonferrous sheet thicknesses. The letters "MSG" stand for "Manufacturers' Standard Gage" for sheet steel thicknesses.

³Tanks over 400 gallons shall be designed with a factor of safety of four on the ultimate strength of the tank material used with a design head of not less than 4 feet of liquid above the top of the tank.

⁴Anodic to most common metals. Avoid dissimilar-metal contact with tank body unless galvanically compatible.

⁵And other alloys acceptable to the Commandant.

(2) All tank joints, connections, and fittings shall be welded or brazed. Tanks with flanged-up top edges will not be acceptable.

(3) All tanks exceeding 30 inches in any horizontal dimension shall be fitted with vertical baffle plates of the same material as the tank. Limber holes at the bottom and air holes at the top of all baffles shall be provided. Tanks constructed of material of greater thickness than minimum requirements and that are reinforced with stiffeners may be accepted without baffles.

(4) An opening fitted with a threaded pipe plug may be used on the bottom of the tank for cleaning purposes.

(b) *Supports.* (1) Tanks shall be adequately supported and braced to prevent movement. The supports and braces shall be insulated from contact with the tank surface with a nonabrasive and nonabsorbent material.

(c) *Fittings.* (1) Filling lines shall be at least 1½ inches standard pipe size and extend to within 1½-pipe diameters of the bottom of the tank.

(2) Suction lines from diesel oil tanks may be taken from the bottom provided a shutoff valve is installed at the tank. Tanks for Grades B and C liquids shall have top suction only.

(3) Vent lines shall be at least equal in size to the filling lines.

(4) When a cargo tank contains Grades B or C liquids, the vent lines shall be terminated with an approved pressure vacuum relief valve not less than 3 feet above the weather deck. When a cargo tank contains Grades D or E liquids the vent line may be terminated with a gooseneck fitted with flame screen at a reasonable height above the weather deck.

(d) *Hydrostatic tests.* All tanks vented to the atmosphere shall be hydrostatically tested to a pressure of 5 pounds per square inch or 1½ times the maximum head to which they may be subjected in service. A standpipe of 11½ feet in length attached to the tanks may be filled with water to accomplish the 5 pounds per square inch test.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 72-206R, 38 FR 17229, June 29, 1973; CGD 76-061, 41 FR 23401, June 10, 1976]

§ 105.20-5 Piping systems.

(a) Piping shall be copper, nickel copper, or copper nickel having a minimum wall thickness of 0.035"; except that seamless steel pipe or tubing which provides equivalent safety may be used for diesel cargo systems.

(b) Valves shall be of a suitable non-ferrous metallic Union Bonnet type with ground seats except that steel or nodular iron may be used in cargo systems utilizing steel pipe or tubing.

(c) Aluminium or aluminum alloy valves and fittings are prohibited for use in cargo lines.

§ 105.20-10 Pumps.

(a) Pumps for cargo dispensing shall be of a type satisfactory for the purpose.

(b) A relief valve shall be provided on the discharge side of pump if the pressure under shutoff conditions exceeds 60 pounds. When a relief valve is installed, it shall discharge back to the suction of the pump.

(c) Where electric motors are installed with dispensing pumps they shall be explosion proof and shall be labeled as explosion proof by Underwriter's Laboratories, Inc., or other recognized laboratory, as suitable for Class I, Group D atmospheres.

§ 105.20-15 Grounding.

(a) All tanks and associated lines shall be electrically grounded to the vessel's common ground.

(b) A grounded type hose and nozzle shall be used for dispensing fuels.

Subpart 105.25—Additional Requirements—When Cargo Tanks Are Installed Below Decks

§ 105.25-1 General requirements.

(a) Cargo tank and piping systems shall be as described in Subpart 105.20.

§ 105.25-5 Compartments or areas containing cargo tanks or pumping systems.

(a) Compartments or areas containing tanks or pumping systems shall be closed off from the remainder of the vessel by gastight bulkheads. Such gastight bulkheads may be pierced for a drive shaft and pump engine control rods if such openings are fitted with stuffing boxes or other acceptable gland arrangements.

§ 105.25-7 Ventilation systems for cargo tank or pumping system compartment.

(a) Each compartment shall be provided with a mechanical exhaust system capable of ventilating such compartment with a complete change of air once in every 3 minutes. The intake duct or ducts shall be of sufficient size to permit the required air change. The exhaust duct or ducts shall be located so as to remove vapors from the lower portion of the space or bilges.

(b) The ventilation outlets shall terminate more than 10 feet from any opening to the interior of the vessel which normally contains sources of vapor ignition. The ventilation fan shall be explosion proof and unable to act as a source of ignition.

§ 105.25-10 Cargo pumping installation.

(a) Cargo pumps shall not be installed in the cargo tank compartment unless the drive system is outside the compartment.

(b) Suction pipelines from cargo tanks shall be run directly to the

pump, but not through working or crew spaces of vessel.

§ 105.25-15 Spacings around tanks.

(a) Tanks shall be located so as to provide at least 15" space around tank, including top and bottom to permit external examination.

§ 105.25-20 Shutoff valves required.

(a) Shutoff valves shall be provided in the suction lines as close to the tanks as possible. The valves shall be installed so as to shut off against the flow.

(b) Remote control of this shutoff valve shall be provided where deemed necessary by the marine inspector.

Subpart 105.30—Electrical Requirements

§ 105.30-1 Electrical fittings and fixtures.

(a) In compartments or areas containing tanks or pumps handling other than Grade E petroleum products, no electrical fittings, fixtures, nor electrical equipment shall be installed or used unless approved for a Class I, Group D hazardous location and so labeled by Underwriter's Laboratories, Inc., or other recognized laboratories. (See subpart 110.10 of subchapter J (Electrical Engineering) of this chapter for listings of standards.)

(b) All electrical equipment, fixtures and fittings within 10 feet of a vent outlet or a dispensing outlet shall be explosion proof and shall be labeled as explosion proof by Underwriter's Laboratories, Inc., or other recognized laboratory, as suitable for Class I, Group D atmospheres.

§ 105.30-5 Grounding of electrical equipment.

(a) All electrical equipment shall be grounded to the vessel's common ground.

Subpart 105.35—Fire Extinguishing Equipment

§ 105.35-1 General.

(a) In addition to the requirements in § 28.160 of subchapter C of this chapter, at least two B-II dry chemical or foam

portable fire extinguishers bearing the marine type label of the Underwriter's Laboratories, Inc., shall be located at or near each dispensing area.

(b) This equipment shall be inspected prior to issuing a letter of compliance.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 95-028, 62 FR 51208, Sept. 30, 1997]

EFFECTIVE DATE NOTE: By CGD 95-028, 62 FR 51208, Sept. 30, 1997, § 105.35-1 was amended by revising paragraph (a), effective Oct. 30, 1997. For the convenience of the user, the superseded text is set forth as follows:

§ 105.35-1 General.

(a) In addition to the fire extinguishing requirements in section 526g of title 46, U.S.C., and sections 25.30-1 to 25.30-90, inclusive, in Subchapter C (Uninspected Vessels) of this chapter, or other laws and regulations in this chapter which may be applicable to a particular vessel at least two BII dry chemical or foam portable fire extinguishers bearing the marine type label of the Underwriter's Laboratories, Inc., shall be located at or near each dispensing area.

* * * * *

§ 105.35-5 Fire pumps.

(a) All vessels shall be provided with a hand operated portable fire pump having a capacity of at least 5 gallons per minute. This fire pump shall be equipped with suction and discharge hose suitable for use in firefighting. This pump may also serve as a bilge pump.

(b) A power-driven fire pump shall be installed on each vessel of more than 65 feet in length overall.

(1) The power fire pump shall be self-priming and of such size as to discharge an effective stream from a hose connected to the highest outlet.

(2) The minimum capacity of the power fire pump shall be 50 gallons per minute at a pressure of not less than 60 pounds per square inch at the pump outlet. The pump outlet shall be fitted with a pressure gage.

(3) The power fire pump may be driven off a propulsion engine or other source of power and shall be connected to the fire main. This pump may also be connected to the bilge system so that it can serve as either a fire pump or a bilge pump.

§ 105.35-10 Fire main system.

(a) All vessels required to be provided with a power-driven fire pump shall also be provided with a fire main system including fire main, hydrants, hose, and nozzles.

(b) Fire hydrants, when required, shall be of sufficient number and so located that any part of the vessel may be reached with an effective stream of water from a single length of hose.

(c) All piping, valves, and fittings shall be in accordance with good marine practice and suitable for the purpose intended.

§ 105.35-15 Fire hose.

(a) One length of fire hose shall be provided for each fire hydrant required.

(b) Fire hose may be commercial fire hose or equivalent of not over 1½-inch diameter or garden hose of not less than ⅝-inch nominal inside diameter. Hose shall be in one piece not less than 25 feet and not more than 50 feet in length.

(c) If 1½ inch diameter fire hose is used after January 1, 1980, each length of hose must:

(1) Be lined commercial fire hose that conforms to Underwriters' Laboratories, Inc. Standard 19 or Federal Specification ZZ-H-451E. A hose that bears the label of Underwriters' Laboratories, Inc. as lined fire hose is accepted as conforming to this requirement; and

(2) Have a combination nozzle approved by the Commandant in accordance with § 162.027-6 of this chapter.

(d) If garden hose is used, it shall be of a good commercial grade constructed of an inner rubber tube, plies of braided cotton reinforcement and an outer rubber cover or of equivalent material, and shall be fitted with a commercial garden hose nozzle of good grade bronze or equivalent metal.

(e) All fittings on fire hose shall be of brass, copper, or other suitable corrosion resistant metal.

(f) A length of fire hose shall be attached to each fire hydrant at all times.

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 74-60, 41 FR 43151, Sept. 30, 1976]

Subpart 105.45—Special Operating Requirements

§ 105.45-1 Loading or dispensing petroleum products.

(a) A commercial fishing vessel must have aboard a letter of compliance valid under subpart 105.15 of this part and must be in compliance with the requirements in the letter while dispensing petroleum products. This letter of compliance issued to a vessel will state—

(1) The number of crewmembers required to hold documents endorsed as tankermen under part 13 of this chapter; and

(2) For each vessel of 200 gross tons or over, the complement of officers under Title 46 U.S.C. 8304.

(b) Each person in charge of a transfer of liquid cargo in bulk to or from a cargo tank shall hold—

(1) A valid merchant mariner's document endorsed as "Tankerman-PIC" or restricted "Tankerman-PIC" authorizing transfer of the classification of cargo involved; or

(2) A valid license authorizing service as master, mate, pilot, or engineer.

[CGD 79-116, 60 FR 17157, Apr. 4, 1995]

§ 105.45-5 Galley fires.

(a) Galley fires are normally permitted during cargo transfer operations. However, prior to transferring Grade B or C cargoes, the tankerman shall make an inspection to determine whether in his judgment galley fires may be maintained with reasonable safety during the transfer operations.

§ 105.45-10 Smoking.

(a) Smoking is prohibited during and in the vicinity of the transfer operations. At other times the senior officer on duty shall designate when and where the crew may smoke.

§ 105.45-15 Warning signals and signs.

(a) During transfer of cargo while fast to a dock, a red signal (flag by day and electric lantern at night) shall be so placed that it will be visible on all sides. At all other times of transfer a red flag only shall be displayed.

§ 105.45-20 Warning sign at gangway.

(a) Warning placards shall be kept at hand for display while a vessel is fast to a dock during transfer of cargo, to warn persons approaching the gangway. The placard shall state in letters not less than 2 inches high substantially as follows:

WARNING

No open lights.
No smoking.
No visitors.

Subpart 105.90—Existing Commercial Fishing Vessels Dispensing Petroleum Products**§ 105.90-1 Existing commercial fishing vessels dispensing petroleum products.**

(a) The prohibition in § 105.05-2 shall apply to all commercial fishing vessels.

(b) Existing vessels must meet the following requirements:

(1) Permanently or temporarily installed tanks or containers used for dispensing in limited quantities petroleum products in bulk, Grades B or lower flammable or combustible liq-

uids, shall meet the applicable requirements in Subparts 105.20 (Tanks and piping systems), 105.25 (Cargo tanks below decks), 105.30 (Electrical). However, these tanks or containers and their associated piping systems in use prior to December 1, 1969, if in satisfactory condition in the opinion of the Officer in Charge, Marine Inspection, may be continued in use as long as they are maintained in such satisfactory condition.

(2) Minor repairs or alterations may be made in permanently or temporarily installed tanks or containers for petroleum products in bulk, which shall be to the satisfaction of the Officer in Charge, Marine Inspection. Major repairs or replacement of such tanks or containers shall be in accordance with requirements governing new installations as set forth in this part.

(3) All commercial fishing vessels must comply with the applicable requirements in subparts 105.15 (Inspection Required), 105.35 (Fire Extinguishing Equipment), and 105.45 (Special Operating Requirements).

[CGFR 69-53, 34 FR 11265, July 4, 1969, as amended by CGD 75-105, 41 FR 17910, Apr. 29, 1976; CGD 79-116, 62 FR 25136, May 8, 1997]